The Claims

What is claimed is:

1. A metal wood golf club head comprising:
a body; and
a front face having an inner surface and an outer surface,
wherein a substantial portion of the inner surface is treated to have a residual compressive stress.

2. The club head of claim 1, wherein the portion of the inner surface is peened.

3. The club head of claim 2, wherein the portion of the inner surface is shot peened.

4. The club head of claim 2, wherein the portion of the inner surface is laser peened.

5. The club head of claim 2, wherein the portion of the inner surface is abrasive waterjet peened.

6. The club head of claim 2, wherein the portion of the inner surface of the front face has a first thickness before being peened and a second thickness after being peened, and the second thickness is less than the first thickness.

7. The club head of claim 2, wherein the face is cast.

8. The club head of claim 7, wherein the portion is about 0.11 inch thick or less.

9. The club head of claim 8, wherein the portion comprises about 60% or more of the inner surface of the front face.

10. The club head of claim 8, wherein the portion comprises about 80% or more of the inner surface of the front face.

11. The club head of claim 7, wherein the portion is about 0.10 inch thick or less.

12. The club head of claim 11, wherein the portion comprises about 60% or more of the inner surface of the front face.

13. The club head of claim 11, wherein the portion comprises about 80% or more of the inner surface of the front face.

14. The club head of claim 2, wherein the face is stamped sheet metal.

15. The club head of claim 2, wherein a substantial portion of the outer surface of the face is peened.

16. The club head of claim 15, wherein the substantial portion of the outer surface comprises about 60% or more of the outer surface.

17. The club head of claim 15, wherein the substantial portion of the outer surface comprises about 80% or more of the outer surface.

18. The club head of claim 15, wherein a portion of the body adjacent to the outer surface is peened.

19. The club head of claim 1, wherein the inner surface and a portion of the body adjacent the face are peened.

20. The club head of claim 1, wherein the face is titanium.

21. The club head of claim 20, wherein the body is titanium.

22. The club head of claim 20, wherein the body is steel.

23. The club head of claim 1, wherein the face is steel.

24. The club head of claim 23, wherein the body is titanium.

25. The club head of claim 23, wherein the body is steel.

26. A method of treating a metal wood golf club head comprising peening an inner surface of the club head, whereby the inner surface is provided with a residual compressive stress.

27. The method of claim 26, wherein the club head comprises a body and a front face having a face thickness, and the inner surface comprises a substantial portion of an inner surface of the front face.

28. The method of claim 27, wherein the portion comprises about 60% or more of the inner surface of the front face.

29. The method of claim 27, wherein the portion comprises about 80% or more of the inner surface of the front face.

30. The method of claim 27, further comprising substantially decreasing the face thickness.

31. The method of claim 30, wherein a substantial amount of alpha case is removed from an inner surface of the front face of the club head.

32. The method of claim 31, wherein between about 30 percent and about 90 percent of the alpha case is removed from a central region of the inner surface of the front face.

33. The method of claim 26, further comprising peening an outer surface of the club head.

34. A front face for a metal wood golf club head, comprising an inner surface and an outer ball-striking surface, wherein a substantial portion of the inner surface is treated to have a residual compressive stress.